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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/600,626 | 06/20/2003 | Archer Lawrence | KIN03003 | 7189 |

33438 7590 03/02/2005

HAMILTON & TERRILE, LLP
P.O. BOX 203518
AUSTIN, TX 78720

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| EXAMINER |
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PRETLOW, DEMETRIUS R

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| ART UNIT | PAPER NUMBER |
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2863

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|----------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/600,626 | Applicant(s) LAWRENCE ET AL. | |
| | Examiner Demetrius R. Pretlow | Art Unit 2863 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1, 4, 5, 10 is/are rejected.
 7) ☒ Claim(s) 2, 3, 6-9 and 11-17 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

On page 1, line 10, it appears that –Behvavioral—should be –Behavioral--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 4 recites the limitation "the test program" in lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by WU 5,831,992. Wu teach a tester (12) operable to generate test data and apply the test data to the electronic device to determine the response of the electronic device; Note Wu column 3, lines 53-58. Wu teach a capture interface operable to capture the test data communicated to the electronic device by the tester;(performed by the self test of

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the integrated circuit) Note Wu column 4, lines 6,7 and 12. Wu teach a compression engine (14) in communication with the capture interface and operable to compress the test data; Note column 4, lines 12-14 and lines 48-54. Wu teach a memory in communication with the compression engine and operable to save the compressed test data. Note Wu column 4, lines 26-28.

In reference to claim 4, Wu teach the tester is further operable to run the test program on production electronic devices (CUT) to detect the error response. Note column 3, lines 58-60.

In reference to claim 5, Wu teach a vector generator operable to generate vector test data. Note column 4, lines 43-46.

In reference to claim 10, Wu teach communicating the test data to the electronic device through an interface; The interface is not explicitly taught however in order for the signal generator to input a test vector in the integrated circuit as taught by Wu, there must be an interface. Note Wu column 3, lines 56-58. Wu teach capturing the test data communicated to the electronic device; Note Wu column 4, lines 12. Wu teach compressing the captured test data; Note column 4, lines 13 and 14. Wu teach storing the compressed test data; Note Wu column 4, lines 24-26. Wu teach detecting an error response by the electronic device to the test data; Note Wu column 7, lines 22,23 and 30-32. Wu teach analyzing the compressed test data to identify the source of the error response. Note column 7, lines 45 and 46.

Allowable Subject Matter

Claims 2,3,6-9, and 11-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In reference to claim 2, the prior art does not teach the combination of claim limitations in particular the limitation of an analyzer interfaced with the de-compression engine and operable to analyze the de-compressed test data to determine the test data source of an electronic device error response.

In reference to claim 6, the prior art does not teach the combination of claim limitations in particular the limitation of a memory device operable to store data fields according to address and control information and the vector generator generates memory vectors for storage on the memory device.

In reference to claim 9, the prior art does not teach the combination of claim limitations in particular the limitation of a plural memory motherboards; a memory parser associated with each memory motherboard; plural memory controllers associated with each memory parser; and plural memory storage devices associated with each memory controller; wherein the memory parser coordinates with its associated memory controllers to store test data on plural memory storage devices in sequence so that the memory storage devices operate on a lower clock speed than the test data generation clock speed.

In reference to claim 11, the prior art does not teach the combination of claim limitations in particular the limitation of a memory device and generating test data further

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comprises generating vectors of memory test data for storage on the memory device, the memory test data having data field, address and control information.

In reference to claim 17, the prior art does not teach the combination of claim limitations in particular the limitation of a further comprises coordinating storage of the test data in plural storage devices so that the storage devices operate at a slower clock speed than the clock speed associated with the generation of the test data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Demetrius R. Pretlow whose telephone number is (703) 272-2278. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Demetrius R. Pretlow

Demetrius Pretlow 2/23/05

Patent Examiner



MICHAEL NGHIEM
PRIMARY EXAMINER